

Ans
Ans 2

dummy pattern 32 using a laser to electrically separate the gate line 4 from the gate dummy pattern 32 and thereafter electrically connecting the broken data line 2 to the gate dummy pattern 32 by laser welding. The gate dummy pattern 32 is positioned so as to overlap, by about 0.5 to 1 μm , the data line 2 and the pixel electrode 14, thereby serving as a black matrix shut off a light leaking between the data line 2 and the pixel electrode 14. When the gate dummy pattern 32 is used as a black matrix as described above, the area overlapping the pixel electrode 14 can be further reduced in comparison to conventional black matrices to provide an aperture ratio increase of about 5 to 6%.

Ans 4.160

Please rewrite the paragraph beginning on page 8, line 32, and ending on page 10, line 23, as follows:

Referring to Fig. 7, there is shown a thin film transistor substrate in a liquid crystal display (LCD) according to a third embodiment of the present invention. The thin film transistor substrate of Fig. 7 has the same elements as that of Fig. 4, except that a protrusion 2a is provided at the data line 2 so as to shut off any light leaking between the gate line 4 and the gate dummy pattern 30. The gate dummy pattern 30 formed at the same layer as the gate line 4 overlaps with a data line 2 and a pixel